

| <b>UTILITY<br/>PATENT APPLICATION<br/>TRANSMITTAL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | Attorney Docket No. PD 02-1013 (21797-0004)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
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| (Only for new nonprovisional applications under 37 C.F.R. 1.53(b))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | First Inventor KUKULKA et al.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Title SOLAR CELL WITH HIGH TEMPERATURE FRONT ELECTRICAL CONTACT, AND ITS FABRICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Express Mail Label No. EU 692447558 US                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| <b>APPLICATION ELEMENTS</b><br><i>See MPEP chapter 600 concerning utility patent application contents.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | <b>ADDRESS TO:</b> Assistant Commissioner for Patents<br>Box Patent Application<br>Washington, DC 20231                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| <div>1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17)<br/><i>(Submit an original and a duplicate for fee processing)</i></div> <div>2. <input type="checkbox"/> Applicant claims small entity status.<br/>See 37 CFR 1.27.</div> <div>3. <input checked="" type="checkbox"/> Specification [Total Pages <span style="border: 1px solid black; padding: 0 5px;">17</span> ]<br/><i>(preferred arrangement set forth below)</i><ul style="list-style-type: none"><li>- Descriptive title of the Invention</li><li>- Cross Reference to Related Applications</li><li>- Statement Regarding Fed sponsored R &amp; D</li><li>- Reference to sequence listing, a table, or a computer program listing appendix</li><li>- Background of the Invention</li><li>- Brief Summary of the Invention</li><li>- Brief Description of the Drawings ( if filed)</li><li>- Detailed Description</li><li>- Claim(s)</li><li>- Abstract of the Disclosure</li></ul></div> <div>4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets <span style="border: 1px solid black; padding: 0 5px;">2</span> ]</div> <div>5. Oath or Declaration [Total Pages <span style="border: 1px solid black; padding: 0 5px;">2</span> ]<div style="margin-left: 20px;">a. <input checked="" type="checkbox"/> Newly executed (original or copy)</div><div style="margin-left: 20px;">b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63 (d))<br/><i>(for a continuation/divisional with Box 18 completed)</i></div><div style="margin-left: 20px;">i. <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b><br/>Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).</div></div> <div>6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76</div> |  | <div>7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program <i>(Appendix)</i></div> <div>8. Nucleotide and/or Amino Acid Sequence Submission <i>(if applicable, all necessary)</i><div style="margin-left: 20px;">a. <input type="checkbox"/> Computer Readable Form (CRF)</div><div style="margin-left: 20px;">b. Specification Sequence Listing on:<div style="margin-left: 20px;">i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or</div><div style="margin-left: 20px;">ii. <input type="checkbox"/> paper</div></div><div style="margin-left: 20px;">c. <input type="checkbox"/> Statements verifying identity of above copies</div></div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"><b>ACCOMPANYING APPLICATIONS PARTS</b><div>9. <input checked="" type="checkbox"/> Assignment Papers (cover sheet &amp; document(s))</div><div>10. <input type="checkbox"/> 37 C.F.R. §3.73(b) Statement <input checked="" type="checkbox"/> Power of Attorney<br/><i>(when there is an assignee)</i></div><div>11. <input type="checkbox"/> English Translation Document <i>(if applicable)</i></div><div>12. <input checked="" type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input checked="" type="checkbox"/> Copies of IDS Citations</div><div>13. <input type="checkbox"/> Preliminary Amendment</div><div>14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503)<br/><i>(Should be specifically itemized)</i></div><div>15. <input type="checkbox"/> Certified Copy of Priority Document(s)<br/><i>(if foreign priority is claimed)</i></div><div>16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.</div><div>17. <input checked="" type="checkbox"/> Other: <u>Certificate of Express Mailing</u></div></div> |  |

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

10/623900  
07/21/03

# FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ ) 790

## Complete if Known

|                      |                         |
|----------------------|-------------------------|
| Application Number   | n/a                     |
| Filing Date          | July 21, 2003           |
| First Named Inventor | KUKULKA et al.          |
| Examiner Name        | n/a                     |
| Group / Art Unit     | n/a                     |
| Attorney Docket No.  | PD 02-1013 (21797-0004) |

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money ☐ Other ☐ None  
Order
☒ Deposit Account:Deposit  
Account  
Number  
50-1059Deposit  
Account  
Name  
McNees Wallace & Nurick LLC

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☐ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

| Large Entity |          | Small Entity |          | Fee Description        | Fee Paid  |
|--------------|----------|--------------|----------|------------------------|-----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |                        |           |
| 1001         | 750      | 2001         | 375      | Utility filing fee     | 750       |
| 1002         | 330      | 2002         | 165      | Design filing fee      |           |
| 1003         | 520      | 2003         | 260      | Plant filing fee       |           |
| 1004         | 750      | 2004         | 375      | Reissue filing fee     |           |
| 1005         | 160      | 2005         | 80       | Provisional filing fee |           |
| SUBTOTAL (1) |          |              |          |                        | (\$ ) 750 |

## 2. EXTRA CLAIM FEES

|                    |    |        |   |   |   |    |   |   |
|--------------------|----|--------|---|---|---|----|---|---|
| Total Claims       | 17 | -20 ** | = | 0 | X | 18 | = | 0 |
| Independent Claims | 3  | -3 **  | = | 0 | X | 84 | = | 0 |
| Multiple Dependent |    |        |   |   | X |    | = | 0 |

| Large Entity |          | Small Entity |          | Fee Description                                            | Fee Paid |
|--------------|----------|--------------|----------|------------------------------------------------------------|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |                                                            |          |
| 1202         | 18       | 2202         | 9        | Claims in excess of 20                                     |          |
| 1201         | 84       | 2201         | 42       | Independent claims in excess of 3                          |          |
| 1203         | 280      | 2203         | 140      | Multiple dependent claim, if not paid                      |          |
| 1204         | 84       | 2204         | 42       | ** Reissue independent claims over original patent         |          |
| 1205         | 18       | 2205         | 9        | ** Reissue claims in excess of 20 and over original patent |          |
| SUBTOTAL (2) |          |              |          |                                                            | (\$ ) 0  |

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

| Large Entity                      |          | Small Entity |          | Fee Description                                                            | Fee Paid |
|-----------------------------------|----------|--------------|----------|----------------------------------------------------------------------------|----------|
| Fee Code                          | Fee (\$) | Fee Code     | Fee (\$) |                                                                            |          |
| 1051                              | 130      | 2051         | 65       | Surcharge - late filing fee or oath                                        |          |
| 1052                              | 50       | 2052         | 25       | Surcharge - late provisional filing fee or cover sheet.                    |          |
| 1053                              | 130      | 1053         | 130      | Non-English specification                                                  |          |
| 1812                              | 2,520    | 1812         | 2,520    | For filing a request for reexamination                                     |          |
| 1804                              | 920*     | 1804         | 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805                              | 1,840*   | 1805         | 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251                              | 110      | 2251         | 55       | Extension for reply within first month                                     |          |
| 1252                              | 410      | 2252         | 205      | Extension for reply within second month                                    |          |
| 1253                              | 930      | 2253         | 465      | Extension for reply within third month                                     |          |
| 1254                              | 1,450    | 2254         | 725      | Extension for reply within fourth month                                    |          |
| 1255                              | 1,970    | 2255         | 985      | Extension for reply within fifth month                                     |          |
| 1401                              | 320      | 2401         | 160      | Notice of Appeal                                                           |          |
| 1402                              | 320      | 2402         | 160      | Filing a brief in support of an appeal                                     |          |
| 1403                              | 280      | 2403         | 140      | Request for oral hearing                                                   |          |
| 1451                              | 1,510    | 1451         | 1,510    | Petition to institute a public use proceeding                              |          |
| 1452                              | 110      | 2452         | 55       | Petition to revive - unavoidable                                           |          |
| 1453                              | 1,300    | 2453         | 650      | Petition to revive - unintentional                                         |          |
| 1501                              | 1,300    | 2501         | 650      | Utility issue fee (or reissue)                                             |          |
| 1502                              | 470      | 2502         | 235      | Design issue fee                                                           |          |
| 1503                              | 630      | 2503         | 315      | Plant issue fee                                                            |          |
| 1460                              | 130      | 1460         | 130      | Petitions to the Commissioner                                              |          |
| 1807                              | 50       | 1807         | 50       | Processing fee under 37 CFR 1.17 (q)                                       |          |
| 1806                              | 180      | 1806         | 180      | Submission of Information Disclosure Stmt                                  |          |
| 8021                              | 40       | 8021         | 40       | Recording each patent assignment per property (times number of properties) | 40       |
| 1809                              | 750      | 2809         | 375      | Filing a submission after final rejection (37 CFR § 1.129(a))              |          |
| 1810                              | 750      | 2810         | 375      | For each additional invention to be examined (37 CFR § 1.129(b))           |          |
| 1801                              | 750      | 2801         | 375      | Request for Continued Examination (RCE)                                    |          |
| 1802                              | 900      | 1802         | 900      | Request for expedited examination of a design application                  |          |
| Other fee (specify) _____         |          |              |          |                                                                            |          |
| *Reduced by Basic Filing Fee Paid |          |              |          |                                                                            |          |
| SUBTOTAL (3)                      |          |              |          |                                                                            | (\$ ) 40 |

## SUBMITTED BY

## Complete (if applicable)

|                   |                    |                                  |        |           |               |
|-------------------|--------------------|----------------------------------|--------|-----------|---------------|
| Name (Print/Type) | Carmen Santa Maria | Registration No. Attorney/Agent) | 33,453 | Telephone | 717-237-5226  |
| Signature         | Carmen Santa Maria |                                  |        | Date      | July 21, 2003 |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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07/21/03  
01576 U.S. PTO

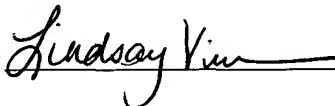
## **CERTIFICATE OF EXPRESS MAILING UNDER 37 C.F.R. 1.10**

I hereby certify that the following documents are being deposited with the United States Postal Service Express Mail Post Office to Addressee service under 37 C.F.R. 1.10 on the date indicated below, Express Mail Label Number **EU 692447558 US**, dated July 21, 2003 and addressed to:

Mail Stop PATENT APPLICATION  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

1. Return Acknowledgment Postcard
2. Utility Patent Application Cover Sheet
3. Fee Transmittal Form
4. Patent Application (17 Pages)
5. Drawings (2 sheets)
6. Declaration & Power of Attorney (1 copy of executed original, 2 pages)
7. Assignment Recordation Form
8. Assignment (1 copy of executed original, 1 page)
9. Information Disclosure Statement
10. PTO/SB/08
11. References Cited (4)

By: (Type signature) Lindsay Vican

Written Signature:   
Date: July 21, 2003